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Preface

Formal language theory is the oldest branch of theoretical computer science. It was initiated by the Norwegian Axel Thue at the very beginning of this century. The need for a formal grammatical description of specific languages arises in various scientific disciplines. This makes formal language theory a really interdisciplinary area of science. This fact is apparent also in the historical development of the area. The oldest trends come from pure mathematics. Recent ones include models for natural and artificial languages, and the development of simple organisms. The latter have turned out to be very illustrative in computer graphics.

Formal language theory has been capable of focusing the attention on a variety of problem areas, many of which are today considered as separate disciplines. The present issue presents research from a number of areas of interest today. The contributions range from algebraic theory to machine models and parallelism. One contribution penetrates in a fascinating way into the roots of grammars and Chomsky's deep structures.

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